

CONVENTIONAL MECHANICAL LOCK CYLINDERS AND KEYS WITH
ELECTRONIC ACCESS CONTROL FEATURE

Abstract of the Disclosure

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5 A mechanical key and lock cylinder with mechanical bittings include an electronic access control feature, with minimal modification and without affecting or interfering with the mechanical function of the key and cylinder. A small, low-profile memory cell is embedded in a recess or later hole through the key, with one cell terminal grounded to the key and the other having a contact extension. When the key is inserted into the keyway of the cylinder plug, the ground connection is made with the cylinder and the memory cell contact extension engages a spring-loaded contact of a connector unit which extends from the cylinder plug. An insulated wire carries the conductive path out of the lock cylinder. The key remains of very low profile, and the cylinder plug is modified only by a small longitudinal bore from front to rear. Existing mechanical locks and cylinders can easily be retrofitted with the electronic access control feature. In another embodiment the key has its contacts on one or both sides of the key blade rather than at the shoulder of the key head. The memory cell device in or on the key head can include a

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20 microprocessor, battery and read/write memory.

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